

CLAIMS

What is claimed is:

5 1. A vacuum head device configured to withdraw a fluid from
a carpeted surface, the device comprising:

a) an elongated base plate configured to be movably
disposed on the carpeted surface, and having a tapering cross
section with a wider upper end and a narrower lower end
configured to penetrate into the carpeted surface; and

b) at least one aperture, formed in the base plate,
configured to withdraw the fluid under a vacuum force.

10 2. A device in accordance with claim 1, wherein the at least
one aperture includes a plurality of apertures formed in an array
in the base plate.

15 3. A device^o in accordance with claim 2, wherein the base
plate has a lower surface; and wherein the plurality of apertures
are formed at the lower end, and sized larger than a width of the
lower surface, creating a plurality of protrusions extending from
20 the base plate configured to penetrate the carpeted surface.

3. A device in accordance with claim 3², wherein the protrusions have a total surface area between the apertures less than a total area of the apertures.

5 4. A device in accordance with claim 3², wherein each of the protrusions have a width between the apertures less than a width of the apertures.

10 5. A device in accordance with claim 1, wherein the cross section of the base plate is V-shaped, and the lower end is rounded.

11 6. A device in accordance with claim 1, wherein the base plate includes a forward surface; and further comprising:

at least one channel, formed in the lower end of the base plate and extending from the forward surface to the at least one aperture.

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8. A vacuum head device configured to withdraw a fluid from a carpeted surface, the device comprising:

a) an elongated base plate configured to be movably disposed on the carpeted surface; and

b) a plurality of apertures, formed in an array in the base plate, configured to withdraw the fluid under a vacuum force.

9. A device in accordance with claim 8, wherein the base plate has a tapering cross section with a wider upper end and a narrower lower end configured to penetrate into the carpeted surface.

10. A device in accordance with claim 9, wherein the cross section of the base plate is V-shaped, and the lower end is rounded.

11. A device in accordance with claim 9, wherein the base plate has a lower surface; and wherein the plurality of apertures are formed at the lower end, and sized larger than a width of the lower surface, creating a plurality of protrusions extending from the base plate configured to penetrate the carpeted surface.

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12. A device in accordance with claim 11, wherein the protrusions have a total surface area between the apertures less than a total area of the apertures.

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13. A device in accordance with claim 11, wherein each of the protrusions have a width between the apertures less than a width of the apertures.

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14. A device in accordance with claim 8, wherein the base plate includes a forward surface; and further comprising:

a plurality of channels, formed in the lower end of the base plate and each extending from the forward surface to one of the plurality of apertures.

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15. A vacuum head device configured to withdraw a fluid from a carpeted surface, the device comprising:

a) an elongated base plate configured to be movably disposed on the carpeted surface, and having a tapering cross section with a wider upper end and a narrower lower end configured to penetrate into the carpeted surface; and

b) a plurality of apertures, formed in an array in the base plate, configured to withdraw the fluid under a vacuum force.

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16. A device in accordance with claim 15, wherein the plurality of apertures are formed at the lower end.

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17. A device in accordance with claim 15, wherein the base plate has a lower surface; and wherein the plurality of apertures are formed at the lower end, and sized larger than a width of the lower surface, creating a plurality of protrusions extending from the base plate configured to penetrate the carpeted surface.

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18. A device in accordance with claim 17, wherein the protrusions have a total surface area between the apertures less than a total area of the apertures.

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19. A device in accordance with claim 17, wherein each of the protrusions have a width between the apertures less than a width of the apertures.

5 20. A device in accordance with claim 15, wherein the cross section of the base plate is V-shaped, and the lower end is rounded.

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21. A device in accordance with claim 15, wherein the base plate includes a forward surface; and further comprising:

a plurality of channels, formed in the lower end of the base plate and each extending from the forward surface to one of the plurality of apertures.

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